

Municipality/Organization: Town of Seabrook

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NPDES Phase II Small MS4 General Permit Annual Report

Part I. General Information


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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

Printed Name: Frederick Welch

Title: Town Manager

Date: April 24, 2006

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1.0 INTRODUCTION AND BACKGROUND

In 1990, The United States Environmental Protection Agency (EPA) began implementing stormwater management requirements under the NPDES program. These requirements, known as Phase I of the NPDES stormwater program, were intended to reduce pollution in stormwater discharges for large urban areas with populations of 100,000 or greater.

On December 8, 1999, the Phase II Rule of the NPDES stormwater program was published to address Municipal Separate Storm Sewer Systems (MS4s) within urban areas of populations less than 100,000 that were not addressed under the Phase I program. Objectives of the Phase II rule are for the MS4s to develop, implement and enforce a 5-year stormwater program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

On May 1, 2003 the EPA issued the General Permit for Stormwater Discharges from MS4s. The general permit requires that the stormwater program for each MS4 submit an annual evaluation. The following report contains information regarding the activities on the stormwater program for the previous year. The report contains the information required in the general permit as follows: (a) Self-Assessment Review of Compliance with the Permit Conditions; (b) Assessment of the Appropriateness of the selected Best Management Practices (BMPs); (c) Assessment of the Program towards Achieving the Measurable Goals; (d) Summary of the Results of Any Information that has been Collected and Analyzed; (e) Discussion of Activities for the Next Reporting Cycle; (f) Discussion of any Changes in Identified BMPs or Measurable Goals; and (g) Reference any Reliance on another Entity for Achieving any Measurable Goal.

2.0 SELF-ASSESSMENT REVIEW OF COMPLIANCE WITH THE PERMIT CONDITIONS

The Town of Seabrook filed a NPDES Phase II Stormwater Management Plan in March 2003. On August 13, 2003, the EPA sent a letter to the town stating that the stormwater program was currently in compliance with the conditions of the General Permit. On May 1, 2004 and May 1, 2005 the Town submitted the Annual Reports for Year 1 and Year 2, respectively, to the EPA and the NH DES.

The Town of Seabrook has completed the required self-assessment for the Year 3 Annual Report and has determined that the municipality is in compliance with all the permit conditions. The Town of Seabrook worked on several stormwater issues over the past year and achieved many of the goals set for the 2004-2005 Stormwater Year. In addition, the Town continues to work toward the goals for next year. The town will continue to file for grants from various sources, including the New Hampshire Department of Environmental Services (NHDES) and the New Hampshire Estuary Project (NHEP), subject to availability, to assist in achieving the town's goals for stormwater structure maintenance and mapping.

3.0 ASSESSMENT OF THE APPROPRIATENESS OF THE SELECTED BMPs

Most of the best management practices (BMPs) selected for the stormwater program were appropriate for the town of Seabrook. The town reviewed BMPs, reconsidered BMPs and determined that the following should be done to best incorporate public education, public participation and good housekeeping for municipal operations.

COMMENTS ON APPROPRIATENESS

BMP ID Number	BMP Description
1.1	Distribute Information – Develop stormwater flyer to businesses with stormwater facilities on site Distribute Information – Include info on benefits of back-yard stream clean-up with West Nile Virus fact sheet

The BMP for the distribution of information was revised to provide a separate Stormwater Fact Sheet instead of only revising the West Nile Fact Sheet. The goal was also revised to include distribution to the Town Hall, Recreation Building, Public Library and interested parties. The BMP for the distribution of the stormwater flyer was updated to take into account that the goals will be met earlier in the SWMP.

BMP ID Number	BMP Description
1.4	Classroom participation – SWTF Tours

The BMP for classroom participation was determined to be more appropriate as volunteer work in catch basin stenciling and litter clean up, then as a SWTF tour. Seabrook's classroom participation goal was expanded to allow for activities in which kids can have a 'hands on approach' to stormwater management.

BMP ID Number	BMP Description
1.6	Other – Develop a program to promote, publicize and facilitate public reporting of illicit discharges or discharges

The BMP for developing a program to promote, publicize and facilitate public reporting of illicit discharges or discharges was revised since Seabrook is now working with the Seacoast Coalition and the city of Portsmouth to develop a public education plan for illicit discharges.

4.0 SUMMARY OF MINIMUM CONTROL MEASURES

The EPA required the town to meet six control measures. The following outlines the progress of the town in achieving the measurable goals for the third year. The annual evaluation of BMPs is also detailed in Table 4-1, Annual Evaluation. Table 4-1 also discusses activities for the next reporting cycle, and identifies any changes in the identified BMPs or measurable goals.

4.1 PUBLIC EDUCATION AND OUTREACH

The town of Seabrook worked this year on distributing the stormwater educational materials developed in Stormwater Year 2. The stormwater poster and several brochures were placed in the Town's Recreation Building, Town Hall and Public Library. The stormwater brochures and flyers were distributed to stormwater stakeholders, such as the hunter's safety course and a citizens group at the Trinity United Church interested in stream cleaning. The materials were also sent to the Planning Board and Conservation Commission. In addition, the DPW is coordinating their efforts to map and locate detention and retention basins with mailing out the stormwater brochure to businesses with stormwater infrastructure. The town also replayed the stormwater video titled, "Stormwater Runoff, There is no Away" on the local cable public access channel.

4.2 PUBLIC PARTICIPATION AND INVOLVEMENT

The town's public participation and involvement this year was focused on interested Stormwater Stakeholders. While the town continues to solicit stormwater maintenance volunteers by making announcements at public forums, the town had more success soliciting volunteers from Town committees, town groups, and the local high school. Volunteers worked this year to clean up drainage areas. The marine biology class at Winnacunnet High School conducted a litter clean up in drainage areas. And, the Trinity Church Citizen's group conducted a wetland clean up along Adam's Avenue. In addition, these stormwater stakeholders were provided with the stormwater educational materials. The DPW was also able to secure the funds for outfall location signage.

4.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Mapping

The town is working towards a town wide GIS system. The town progressed with the GIS map of the system by using a Geographical Position System (GPS) to take the electronic positions of the outfalls and detention basin for the GIS map. All of the twenty five outfalls and most of

SEABROOK, NEW HAMPSHIRE
NPDES PHASE II STORMWATER MANAGEMENT PLAN
YEAR 3 - ANNUAL EVALUATION OF MINIMUM CONTROL MEASURES

Stormwater Management Plan (SWMP)	SWMP	Responsible Party/Implementing Party	Measure Goal	SWMP Goal	Progress Goal (Y1, Y2, Y3)	Attainment
Public Education and Outreach						
Fact Sheets on Town Website	DPW	Complete one new fact sheet	Follow up with BOS on website status	The DPW contacted the BOS to remind them to post the Stormwater Poster on the Town's website.	Post Stormwater Poster on the Seabrook website.	
Develop stormwater flyer to businesses with stormwater facilities on site	DPW Consultant	Complete flyer and distribute to all businesses maintaining on-site SW facilities	Review address list from the Assessor's office and determine a mailing list for brochure distribution.	The DPW is coordinating their efforts to map and locate detention and retention basins with mailing out the brochure to businesses with stormwater infrastructure.	Mail out brochure to businesses with stormwater infrastructure. Continue to make Stormwater brochure available to interested parties.	The goals fact that t Stormwat
Distribute Information						
Include info on benefits of back-yard stream clean-up with Stormwater Fact Sheet.	DPW	Send out stream clean-up info		The benefits of backyard clean up are outlined in the Seabrook Stormwater Fact sheet. The Stormwater fact sheet was distributed to the Recreation Building, Town Hall, DPW, and Public Library. In addition the fact sheet was distributed to interested stormwater stakeholders, such as the Trinity United Church citizens group.	Continue to make the Stormwater Fact sheet available to interested parties.	This storr Stormwat Nile Fact The goal Town Ha interested
Develop pamphlets for distribution at Town Hall, DHS, schools, community events/fairs, as well as mailing lists	DPW Consultant	Distribute to 75% of residents		The Seabrook Stormwater Brochure and Fact Sheet distributed to the Recreation Building, Town Hall and Public Library. In these locations, most residents have access to the information. In addition, the materials were distributed to interested stormwater stakeholders.		
Public Service Announcement	Town Hall Public Access TV	DPW	Run video during rolling community information	The Town completed this goal in Year 1. In addition, the town is considering rerunning the video.	Run video on Town Hall TV	
Community Outreach	Develop stormwater informational Poster Board	DPW Consultant	Develop Poster Board	The Stormwater poster continued to be displayed along with stormwater brochures in the recreation building, town hall, and public library.	Continue to display stormwater poster and provide the stormwater brochure and fact sheet.	
	Display Poster Board at various local community events	DPW	Show Poster Board at Town Hall, DPW, and community events			
Classroom Participation	Volunteer Work - Catch Basin Stenciling and litter clean up	DPW	Conduct one session	Winnacunnet High School Marine Biology Class conducted litter clean up in drainage areas.	Conduct session	The class incorpora stenciling

SEABROOK, NEW HAMPSHIRE
NPDES PHASE II STORMWATER MANAGEMENT PLAN
YEAR 3 - ANNUAL EVALUATION OF MINIMUM CONTROL MEASURES

Minimum Control Measure	BMP	Department/Responsibility for implementing BMP	Measurement/Goal	Actual/Target	Progress/Status (Year 3)	Comments
Illicit Discharge Detection and Elimination						
Stormwater System Mapping	Map Outfalls	DPW Consultant	Percentage of Total Outfalls	GPS 25% of Outfalls	25 of 25 outfalls were mapped and inspected.	The Town The SWM achieved.
	Map Pipes, Manholes and Catch basins	DPW Consultant	Percentage of Total System	Map 25% of System	2/3 of the Stormwater System has been mapped.	The goal for this BMP item is to complete the Stormwater mapping program in Year 4.
	Map Structural BMPs (I.e. Detention Basins, Water Quality Inlets, Etc.)	DPW Consultant	Percentage of Total Structures	Map 25% of Structures	Seabrook detention basins were mapped.	Include the detention basin locations on the stormwater system map.
	Strengthen ordinance prohibiting non-storm water discharges into storm sewer system	Planning Board	Development of Ordinance.	Develop Goals for Ordinance.	Seabrook adopted Municipal Stormwater Drainage System Rules and Regulations on May 25, 2005.	Monitor implementation of Rules and Regulations
Rules and Regulations	Develop enforcement procedures for non-storm water discharges, including illegal dumping	Planning Board	Development of Enforcement Procedures	Develop Goals for Enforcement Procedures	Seabrook adopted Municipal Stormwater Drainage System Rules and Regulations on May 25, 2005. The Rules and Regulations include enforcement procedures	Monitor implementation of Rules and Regulations The ordinance Municipal Regulation monitoring Regulation
	Detection/Elimination Inspection	Code Enforcement Officer	Identify and train inspection agents. Begin inspections.	Identify Inspector	The Industrial Pretreatment Manager at the Wastewater Treatment Plant was identified as the Code Enforcement Officer and Inspector.	Train Inspector
	Identify priority areas likely to have illicit discharges	DPW Consultant	Number of outfalls per year. Number of samples per year.	Inspect 25% of Outfalls	25 of the 25 outfalls were inspected and no evidence of contamination was found.	Conduct annual stormwater outfall inspection.
	Illicit Discharge Detection/Elimination Prioritization Plan	DPW Consultant	Plan Completion	Draft Plan	Seabrook created an annual outfall inspection procedure for the DPW. The Year 3 inspections did not find any evidence of contamination. The Town participated in a partnership (Seacoast Coalition/City of Portsmouth) that is expected to develop a sample program	
Post Removal Evaluation and Assessment	Implement plan to detect and address non-storm water discharges	DPW Consultant	Annual Inspection		Seabrook created an annual outfall inspection procedure for the DPW. The Year 3 inspections did not find any evidence of contamination. The Town participated in a partnership (Seacoast Coalition/City of Portsmouth) that is expected to develop a sample program	Inspect outfalls according to the DPW
	Program to inspect and report on conditions after illicit connections have been removed	Code Enforcement Officer	Annual Report		The Town participated in a partnership (Seacoast Coalition/City of Portsmouth) that is expected to develop a sample program	Prepare report as required
						The response was updated

SEABROOK, NEW HAMPSHIRE
NPDES PHASE II STORMWATER MANAGEMENT PLAN
YEAR 3 - ANNUAL EVALUATION OF MINIMUM CONTROL MEASURES

MRP-01-006, the Office of Water Policy	BMP	Department Responsibility for Implementing BMP	Measure/Goal	MRP-01-006 MRP-01-006	MRP-01-006 MRP-01-006	MRP-01-006 MRP-01-006
Post-Construction Storm Water Management in New Development and Redevelopment						
Regulatory Mechanism	Develop and implement ordinances regulating controls for post-construction runoff utilizing appropriate BMPs	Planning board	Implement for each project.	Draft Ordinance	Evaluate in partnership context	The ordin Municipa Regulator Coalition.
	Strengthen regulation to protect open spaces and natural vegetation	Planning board	Quarterly/annually review of program.	Draft Ordinance	Evaluate in partnership context	
	Mandatory greenbelt for all new construction along Lafayette Road	Planning board	Implement for each project.	Draft Ordinance	Evaluate in partnership context	
	Implement Shoreland Protection Ordinance	Planning board	Quarterly/annually review of program.	Draft Ordinance	Evaluate in partnership context	
	Zoning Ordinance to allow cluster housing	Planning board	Quarterly/annually review of program.	Draft Ordinance	Evaluate in partnership context	
Review BMP Designs	Pre-construction Review for conformance with standards/regulations	Planning board	Implement for each project.	Identify Staff	Train Staff	
Site Inspection / Enforcement Procedures	During construction inspect for assurance that BMPs are compliant	Planning board	Implement for each project.	Identify Staff	Train Staff	
O&M Procedures	Develop Procedure for Operation and Maintenance of Structural BMPs	Planning board	Development of Procedure	Draft procedure	Monitor	The ordin Municipal Regulator monitoring Regulator

detention basins were mapped this year. In addition, the Town continued to progress towards a complete mapping of the stormwater system. To date approximately two-thirds of the system, including manholes and catch basins, is mapped and the Town has plans to complete the system map in Year 4.

Rules and Regulations

The Town adopted Municipal Stormwater Drainage System Rules and Regulations on May 25, 2005. The rules and regulations prohibit non stormwater discharges into the storm sewer system, and provide enforcement procedures for non stormwater discharges, including illegal dumping. A copy of the rules and regulations is included in Attachment A. In addition, the industrial pretreatment manager at the wastewater treatment plant was identified as the code enforcement officer and inspector.

Illicit Discharge Detection and Elimination (IDDE) Plan

The town confirmed the location of each of twenty five outfalls this year by using GPS. These locations are shown on the figure included in Attachment B. The field team that located the outfalls also conducted visual inspections of the outfalls. The outfall inspection forms are included in Attachment C. The visual inspection of these outfalls did not reveal any evidence of contamination. The town will implement a plan to detect and address non-stormwater discharges when potential contamination is identified.

The Seabrook Municipal Stormwater Drainage System Rules and Regulations adopted on May 25, 2005 includes prohibiting and fines for illicit discharges. The town continues to review bylaw language for the Town Stormwater Bylaw. In Year 3, Seabrook entered into an agreement with the Seacoast Coalition to develop a Town Stormwater Bylaw. Portsmouth, NH is the point community which will develop the initial bylaw. The first meeting of the Seacoast Coalition for the bylaw development will be on May 9, 2006. The Seacoast Coalition program is detailed in a November 15, 2005 letter to Fred Welch, Town Manager. The letter is included in Attachment D.

For Stormwater Year 4, the Town will develop a procedure for the DPW to annually inspect the outfall locations for potential non-stormwater discharges. In addition to the IDDE plan, the town continues to be involved in training seminars for more information on IDDE methods. The DPW manager attended a New Hampshire Seacoast Coalition meeting on January 31, 2006 on IDDE. A copy of the meeting agenda is included in Attachment E.

4.4 CONSTRUCTION SITE RUNOFF CONTROL MEASURES

In Year 3, the town outlined site plan review, site inspection and enforcement procedures for construction site stormwater control in the Municipal Stormwater Drainage System Rules and Regulations. Seabrook adopted Rules and Regulations on May 25, 2005. The Rules and Regulations include BMP design requirements and a procedure for handling reports of non-compliance. In addition, the creation of a Seabrook Town Engineer position was evaluated in 2005. The article was supported by the Town Manager, Budget Committee, Planning Board, and Board of Selectmen but it did not receive Town Meeting approval. The role of Town Engineer would have included pre construction SWPPP review and conducting construction site inspections.

4.5 POST-CONSTRUCTION RUNOFF CONTROL MEASURES

The Seabrook Municipal Stormwater Drainage System Rules and Regulations require that a inspection and maintenance plan be filed with a private drain connection permit. A private drain connection permit is required for commercial or industrial activities, parking lots, disturbance of pervious areas of 1.0 acre or more, creation of 10,000 square feet or more of impervious area, land uses involving the storage, fueling, or maintenance of vehicles or heavy equipment, and all other sites that may have the potential for higher pollutant loading. The creation of a Seabrook Town Engineer position, to review and inspect post construction controls, was evaluated in 2005. The article was supported by the Town Manager, Budget Committee, Planning Board, and Board of Selectmen but it did not receive Town Meeting approval.

4.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING

Employee Training

The Town developed and implemented a training program in accordance with the Industrial NPDES permit for the Transfer Station. On May 2, 2006, training for spill response methods will be conducted at the transfer station. This training will provide a benchmark for the DPW training program in Years 4 and 5. The DPW also acquired a "Jeopardy" style game from the Maine Nonpoint Education for Municipal Officers which was originally designed for the Maine good housekeeping standard operating procedures manual. The DPW will include this game into their Stormwater Year 4 training program.

Stormwater System Operation and Maintenance

The DPW continued to define their stormwater system operation and maintenance plan. The DPW is currently working to develop a plan for the annual inspection of drainage outfalls. This year, the DPW worked with an outside consultant to locate and inspect the outfalls structures, but over the next few Stormwater years, the DPW will work to incorporate the inspections into to their annual procedures.

In order to incorporate regular catch basin cleanings into the stormwater system operation and maintenance plan, the DPW proposed the purchase/lease of a vacuum catch basin and storm drain cleaner at Town Meeting, but the Article was defeated 851 to 793. The DPW did work towards replacing five substandard catch basins by purchasing the construction materials. The catch basins replacement project for these five structures will be completed in Year 4. In addition, the town continues to pursue grants from the NHDES to correct the remaining substandard structures. The town applied for three grants this year; the New Hampshire Estuaries Project Community Technical Assistance Program Grant, the New Hampshire Estuaries Project Local Grant, and the 2006 Watershed Assistance and Restoration Grant. The Seabrook projects were not selected for grant funding.

Municipal Industrial Operations

The DPW worked on the operation procedure for the municipal operations by evaluating the Transfer Station and the DPW site for coverage under the individual Industrial NPDES permit. The transfer station's Stormwater Pollution Prevention Plan (SWPPP) is complete and the Notice of Intent (NOI) will be filed once the General Permit is issued by the EPA. A listing of the content of the SWPPP is included in Attachment F. The stormwater best management practices for the DPW facility will be evaluated under the individual Industrial NPDES permit program in Year 4.

Pollution Prevention

Seabrook utilized the outfall inspections to evaluate the effectiveness of street sweeping in areas with curbs. In Year 3, all of the curb areas with sidewalks were hand swept.

Outfall_Id	Type	Material	Photo_Id	Comment
01A	Culvert	Smooth Plastic	35	
01B	Culvert	Smooth Plastic	36	
01C	Culvert	Smooth Plastic	37	
01D	Culvert	Smooth Plastic	38	
01E	Culvert	Smooth Plastic	39	
01F	Outfall	Concrete	40	2 PIPES W/HOODS
02	Outfall	Corg. Metal (CMP)	44	NOT VISUAL - UNDERWATER
03	Outfall	Concrete	42	TREATMENT PLANT
04A	Outfall	Corg. Metal (CMP)	41	TREATMENT PLANT
04B	Outfall	Concrete	43	TREATMENT PLANT
06A	Culvert	Concrete	33	
06B	Outfall	Concrete	34	
07A	Outfall	Smooth Plastic	28	
07B	Outfall	Smooth Plastic	29	
07C	Culvert	Corg. Metal (CMP)	30	
08	Outfall	Corg. Metal (CMP)	19	
09	Outfall	Concrete	20	
10	Culvert	Concrete	21	
11A	Outfall	Corg. Metal (CMP)	25	
11B	Outfall	Concrete	26	DRAIN MH DIRECTLY INTO CULVERT
11C	Culvert	Concrete	27	OUTFALL 11B - DIRECTLY CONNECT
12A	Outfall	Smooth Plastic	16	NEW
12B	Outfall	Smooth Plastic	17	OVERFLOW OUTFALL
12C	Outfall	Clay	18	
13A	Outfall	Smooth Plastic	14	PRIVATE DRIVEWAY DRAIN??
13B	Culvert	Concrete	15	ORANGE IN COLOR
14A	Outfall	Concrete	11	SOURCE UNKNOWN
14B	Culvert	Concrete	12	
14C	Culvert	Concrete	13	
15	Outfall	Smooth Plastic	09	2 PIPES - 1 CULVERT
16	Culvert	Concrete	10	
17	Outfall	Concrete	01	ORANGE STAIN & GASOLINE SHEEN
18	Culvert	Concrete	02	2 PIPES - ORANGE & GASOLINE
19	Culvert	Concrete	03	
20	Outfall	Concrete	04	FULL OF WATER
21	Outfall	Corg. Metal (CMP)	05	BY SHED BEHIND POOL
22	Outfall	Concrete	06	
23	Culvert	Smooth Plastic	07	CROSS CULVERT - YARD
24	Outfall	Concrete	08	
25	Outfall	Concrete	22	
26	Culvert	Concrete	23	2 PIPES
27	Outfall	Concrete	24	OIL
28	Outfall	Concrete	31	OVERFLOW FROM CB IN YARD
29	Culvert	Concrete	32	SIGNIFICANT SHEEN

Attachment A

Municipal Stormwater Drainage System Rules and Regulations